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THE ZOOLOGIST:

A

POPULAR MONTHLY MAGAZINE

OF

NATURAL HISTORY

AND

JOURNAL FOR RECORDING FACTS & ANECDOTES

RELATING TO

QUADRUPEDS, BIRDS, REPTILES, FISHES, ANNELIDES,
INSECTS, WORMS, ZOOPHYTES, &c.

THEIR HABITS, FOOD, RETREATS, OCCASIONAL APPEARANCE,
MIGRATIONS, NESTS AND YOUNG.

No. CLXXXIII.

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To Entomologists.

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MR. JAMES FOXCROFT, the well-known and experienced Collector, begs to return his sincere thanks to the Trustees of the British Museum, the Nobility and Gentry, and also particularly to the Members of the Entomological Society, for the patronage he has received for a number of years as a Collector of British Lepidoptera and Coleoptera. He begs to state that he intends to visit SIERRA LEONE and the RIVER GAMBIA, leaving this country in November, 1857 (this will be after he returns from his Summer's Collecting in Scotland this year), and that he will remain in Africa during one, two or three Seasons, according to the encouragement he may receive. He will devote the whole of his time to searching for and collecting INSECTS OF ALL ORDERS. In order to enable him to meet the expense attending this journey, he is desirous of obtaining a limited number of Subscribers, at £5 per annum, for one year's collecting of either Lepidoptera or Coleoptera; for two seasons' Subscription, £10 for each Order; and for the three seasons, £15 for each Order. The money subscribed is to be paid to Mr. SAMUEL STEVENS, 24, Bloomsbury Street, London, as early as convenient, as Mr. FOXCROFT wishes to know how many Subscribers he can obtain before leaving England, in order that he may provide a sufficient number of boxes to contain each Subscriber's share separately, it being his intention, if he stops more than one season, to share the whole of the Insects annually. Each box will be sealed, directed with the Subscriber's name and address, and enclosed in one large packing-case addressed to Mr. SAMUEL STEVENS. Any Subscriber not feeling satisfied with what Insects he gets the first year for his Subscription may withdraw his name, as Mr. FOXCROFT's intention is only to take the first year's Subscription before starting, but will take names for the three years. All packing-cases or boxes that the insects are sent in are to be returned to Mrs. Foxcroft. Any person wishing for further information can obtain it upon application to Mrs. Foxcroft, at 3, Union Yard, Oxford Street, near Orchard Street, London, West District.

N.B.—No person will get Coleoptera who subscribes for Lepidoptera only, and no one who subscribes for Coleoptera only will receive Lepidoptera.

Mr. FOXCROFT begs to inform his friends and Subscribers that they are requested to pay their yearly Subscriptions (to Mr. SAMUEL STEVENS, Natural History Agent, 24, Bloomsbury Street, London), for his intended visit to Africa to collect Insects, by the 3rd day of this month, as the packet he intends to go by leaves England between the 3rd and the 12th; and no person can become a Subscriber after Mr. FOXCROFT leaves.

☞ CUT CORK and all kinds of INSECT-BOXES, and all other ENTOMOLOGICAL IMPLEMENTS, and BRITISH INSECTS always on sale.

range; but early in May, happening to make an excursion to the very end of the Prater where it skirts the Danube, five miles from the city, I found there, to my great surprise, a very extensive rookery, in which the young birds were just ready to leave the nest-trees; although up to this time I had looked in vain for a single rook. But the rook is migratory in central Europe, so that it may have been that they really were absent up to the beginning of March; still that would not account for my not having seen one during the months of March and April.

The Danube, at the extremity of the Prater, is a fine field for the ornithologist; and a journey of a few miles from Vienna on either side reveals ornithological scenes of the greatest interest. The navigation of the Danube is very difficult at certain seasons, owing to the shallowness of the water, which leaves numerous small barren islets, either sandy and bare or covered with osiers, &c. These islets are the resort of numberless wild fowl. Ducks of various kinds dart over one's head at every half-dozen yards of progress, and wild geese are in considerable abundance. I have seen as many as 150 of these latter birds suddenly rise within a furlong, and, hurriedly forming one long, irregular line, scour away to a more secluded spot,—a sight not easily forgotten. Besides wild-fowl, also, numerous flocks of Grallæ, as ring plovers, dotterels, sandpipers, lapwings, &c., may be seen busily feeding in the soft mud, and the sandy islets are sometimes entirely black with thousands of rooks and jackdaws, while here and there one is occupied by a score of herons, which, standing motionless, like sentinels, a few yards apart, would almost be passed by unobserved. All alike are intent upon reaping the harvest of food which the retreating waters leave upon these apparently barren tracts.

The hawfinch (*Fringilla coccothraustes*) is by no means uncommon in the Prater, as well as in other situations, as the immediate vicinity of Schönbrunn for example. These birds I often observed, and was struck with the absence of that wildness and shyness described by Yarrell and Doubleday as pertaining to our British individuals. The first one I saw, indeed, soon after my arrival, being of course an interesting event, I watched for a considerable time perched on a bough a little distance above my head; and finally, desiring to see him on the wing, I cried out and clapped my hands in vain, for he did not care to stir. They may usually be seen feeding around the roots of the elms, and on a near approach they fly up one by one, in a perfectly straight line, into a neighbouring tree. They are quiet birds, and delight in woodland spots; and I often detected their presence

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by hearing a single musical note, which, when I first heard it, at once arrested my attention, announcing, by its full tone, a bird above the average warbling size. Besides this note, they often utter a chirp like that of the spotted flycatcher, and a hissing note resembling the call of the redbreast, and these were sometimes succeeded by the first-mentioned musical note. Indeed, I have often mistaken them for one or other of these birds until this peculiar and characteristic note followed. Besides these notes, the hawfinch, in the beginning of April, has a low chattering song, which at a little distance sounds by no means unlike that of the starling.

The first bird I heard singing was the lark (*Alauda arvensis*), on a fine morning on the second of March. A fortnight afterwards I read the following paragraph in the 'Fremden Blatt' of March 15:—"The first larks were remarked here on the 11th of this month, and every place resounded with their spring song. It is singular that larks do not sing out immediately on their arrival, but day by day successively they raise themselves higher and higher in the air, singing a more and more complete and sustained song, so that their instinct of song is heightened the nearer they reach heaven." That they are migratory there, is by no means improbable; and the notion of their gradual improvement in song, though romantically expressed, is perhaps not without its foundation in truth.

Other birds, indigenous with us, succeeded, of which I shall presently give a list; but I must first remark that on the 28th of March I saw and heard a robin (*Sylvia rubecula*) for the first time. This bird, in the neighbourhood of Vienna at least, is rare; and I had often wondered at not seeing the red waistcoat and hearing the welcome pipe of the friendly bird which redeems our winter.

The following British residents took up their song as under:—

Lark ...	... singing	March	2
Chaffinch ...	... „	„	20
Great and Blue Tits	„	„	25
Thrush ...	... „	„	28
Robin ...	... „	„	28
Creeper ...	... „	„	30
Ringdove ...	... cooing	„	30
Blackbird ...	... singing	April	6
Yellowhammer	... „	„	13
Turtle Dove	... cooing	May	8

The last I saw of fieldfares and redwings was on April 8th.

The little chiffchaff made itself heard on April 3rd, and was soon succeeded by his brother travellers. Sitting at breakfast in my residence in the suburbs on the 9th, I heard the willow wren (*Sylvia trochilus*), for the first time, singing merrily in some poplars visible therefrom,—a circumstance which pleased me vastly, inasmuch as at home I have walked miles to hear him announce himself, while here, living as I was in the midst of a city, he made himself distinctly heard from my breakfast-table. The first novelty was the Serin finch (*Fringilla serinus*, Gould), which arrived on the 18th of April, and soon distinguished himself by his active habits and incessant song. He is almost as yellow as a canary, and about the same size, never quiet, and constantly singing, whether perched on a tree-top, or moving, Parus-like, among its branches, or flying cheerily from tree to tree. His song, too, is not monotonous and tiring like the willow wren's, but always fresh, cheerful and inspiriting. It is on these accounts much esteemed by the people, and often seen caged. They always told me its name was "Zeissl," but Bechstein calls it "Der girlitz."

I spoke just now of the scarcity of the redbreast; but there is another bird here which bears a singular resemblance to our winter friend, and that is the redbreasted flycatcher (*Muscicapa parva*), which, in its peculiar actions, as well as in its general appearance, is such as often to lead the general observer to confound the two. This bird, however, is by no means rare around Vienna; and Mr. Gould has the honour of having first distinguished it. It is not quite so large as the common redbreast, and has grayish or bluish gray cheeks, which in our robin are red like the breast. It is remarkable how closely it resembles the pert and active movements of the robin, as though a similarity of external configuration must result in certain peculiarities of action; but I think it probable that its great resemblance to the familiar robin predisposes us to see our Sylvia in the form of a Muscicapa. Like the robin, too, the male and female have little, if any, difference in colour.

The golden oriole (*Oriolus galbula*) is pretty common about Vienna. This beautiful bird, the only European species of Oriolus, and which not unfrequently favours us with its presence here in Kent, even breeding with us occasionally, is a summer visitor at Vienna, arriving in the beginning of May; and the richly contrasted bright yellow and black of his plumage produce an effect of considerable splendour, as he flies along from tree to tree in the sunshine. But it is not easy to catch sight of him, for he confines himself to thickly-wooded districts, seldom appearing in the open country, and changes his position from tree to tree more quickly than in such spots it is easy to follow. The note of the blackbird, deservedly admired for its rich mellowness, is in its turn outvied by the brilliant flute-like notes of its congener, the oriole. His note is a very loud whistle, which may be heard at a great distance, but in richness equalling the flute-stop of a fine-toned organ. But variety there is none in his song, as he never utters more than three notes consecutively, and those at intervals of half-a-minute or a minute. Were it not for his fine tone, therefore, his song would be as monotonous as that of the missel thrush, which in modulation it greatly resembles.

The black redstart (*Sylvia tithys*) is tolerably plentiful, resembling the common species in little more than the rufous tail. Its name of black redstart (or redtail) quite expresses its plumage. Its song, likewise, is inferior in variety and tone to that of its congener, but its actions are sprightly and interesting. I have often seen it, with outstretched wings, lying flat upon the tiles of a house-top, and basking in the sunshine.

The reed locustelle (*Locustella fluviatilis*) is a *protégé* of Natterer, the Vienna naturalist. He separated it from the genus Salicaria on account of some peculiarities of the beak and hind claw. I did not see it, but mention it, inasmuch as it frequents the reed-beds of the Danubian islets, and other marshy districts in the vicinity, and is a bird confined to eastern Europe.

I did not hear the nightingale till May; but when once they arrived they were in abundance here, as well as all over North Germany. It is very common to hear these birds in confinement in the streets of Vienna; I have often been arrested by their well-known notes in the most crowded thoroughfares. The first time I heard them, on searching for their author, I saw, in the window of an upper story, a sort of bundle, from which the sound seemed to proceed; but on directing my telescope to it (which I always carried for observation on the glacis, though in daily peril of being charged with treason) I discovered the nightingale cage wrapped up in an old-printed cloth; indeed, I never heard one sing which was not so concealed. But the Viennese have another and a stouter Philomel, called the thrush nightingale (*Philomela turdoides*) or Vienna nightingale, a species distinguished by the industry of Mr. Blyth; but, though bigger, it by no means attains to the delicacy of intonation of our queen of song. It rather emulates the Merulidæ in strength of voice; and while in the force of its sonorous notes it carries off the palm, it does not encroach upon the prescriptive domain of our pre-eminently "sweet

Philomel." Not only is it larger built, but, inasmuch as its call-note differs from that of Luscinia, it is undoubtedly distinct.

The following list shows the arrival of those summer birds whose advent I could remark with certainty:—

Chiffchaff	April	3
Redstart	„	8
Willow Wren	„	9
Swallow	„	13
Serin Finch	„	18
Martin	„	25
Blackcap	„	25
Cuckoo	„	27
Summer Snipe	„	30
Pettychaps	May	3
Titlark	„	4
Golden Oriole	„	4
Swift	„	7
Lesser Whitethroat	„	7
Nightingale	„	8
Whitethroat	„	9

As spring advances, every pond and marsh resounds with the croak, or rather shriek, of the edible frog (*Rana esculenta*). This very handsome species is far commoner in this neighbourhood, as well as in North Germany generally, than the Rana temporaria of Britain. The land cry uttered by the edible species, Mr. Jenyns tells us, has obtained for them the misnomer of Cambridgeshire nightingales. There can be no doubt that this is the species Aristophanes was accustomed to see, and which act so important a *rôle* in his comedy of the 'Frogs,' his expression, Βρεκεκεκεκὲξ *κοὰξ κοάξ*, being an exact imitation of the croak of this frog when properly intoned; and at every note the translucent sacs beside the head swell out as big as marbles. Indeed, I have remarked that the slightest sound uttered by them seemed to dilate the sacs no less than the loud noise they can and do make at certain times, especially towards evening, when an assemblage of them in a large pond or marsh produces an effect ludicrous in the extreme. I did not see any of the spawn of this species, which I believe, indeed, is not deposited until June; but the spawn of the common frog I found in small quantities at the end of March. Notwithstanding the abundance of the edible frog, I never heard of its forming an article of diet in Vienna; but I may perhaps here mention that the edible snail (*Helix pomatia*) is constantly used for food, and in every bill of fare "Schnecken mit kren" (snails with mustard) are included. I once ordered it: the mollusks were instantly forthcoming, and I tasted but did not finish the dainty. In the neighbouring Lake of Neusiedler-see, a fresh-water turtle, Emys europæa, is taken in considerable numbers. I frequently saw these animals in the laboratory of my friend Professor Brücke, who considers them, for physiological researches, far better adapted than even that physiologist's reptile, the frog, and was always kept supplied with specimens by the fishermen of the neighbourhood.

On Fridays, and especially during Lent, a fish-market is held in that part of the town which borders upon the small arm of the Danube, and is abundantly supplied by the produce of that river. The fish are brought to the spot in immense casks, alive, and are deposited in large shallow tubs, like washing-tubs. Here they may be seen in all conditions, active, lively, dead and dying. The staple of the market is the Danubian carp (*Cyprinus carpio*), called "Donankarpfen" or "Flusskarpfen," a handsome fish with large scales of a golden tinge. They are on an average a foot long, very lively, and cut very red. Such a fish sells for 20 to 25 kreutzer, 8*d.* to 10*d.* English. Great numbers of tubs contain nothing but this fish, sometimes 18 inches long. They are very tenacious of life, and possess great irritability: when taken away whole, they require many blows on the head with a heavy weight before they are quite motionless; and when one is rapidly cut in halves, by being ripped up along the back and belly, I have seen its movements continue even after the separation has been complete. Next to the Danubian carp the most common fish is the pike or "Hecht" (*Esox lucius*), which averages 18 inches long. With their characteristic heaviness, they remain quite quiet in the tub, in spite of the inconvenient activity of the lively and unwieldly carp. A pike about 16 inches long is sold for 30 kreutzer (about 1*s.*) These two fishes constitute about nine-tenths of the market; but there is one other fish which deserves mention. In about every tenth tub of carp and pike there may be seen a fish in form like a carp indeed, but whose monstrous, shapeless scales attract immediate attention. This is the large-scaled carp figured by Bloch as Rex Cyprinorum. In general the scales of this fish, which are very irregular, are arranged in two rows on each side, one parallel with the back and the other with the abdomen. Bloch supposes it to be a distinct variety, but more generally it is considered to be a mule between the carp and the tench, for the minute scales which exist, mingled in patches, among the immense scales of the carp, resemble very greatly those of the tench. In flavour it is superior to the common variety, and it reaches to a considerable size. It is called in Germany "Spiegel-karpfe," or mirror-carp, the blotches with large scales being regarded as mirrors. This mule is, I believe, sometimes found in Lancashire. Common carp are very favourite dishes throughout Germany, and many persons with large estates establish carp-ponds, and derive considerable revenue from the proceeds of their sale.

Of sea-fish I saw none of any kind in the Vienna market, except cod, or "Stockfisch," which is so often represented emblematically upon German houses that I presume it is a sort of national dish. I have often seen over a door-way a rude figure of a fish, with this inscription underneath,—

> "Das Haus steht in Gottes Hant
> Zum Stockfisch ist's genannt."

Inasmuch as the nearest place from which such are obtainable is Trieste, and the railway is not yet completed all the way there, sea-fish is a rare commodity here. I was surprised not to see any Salmonidæ among the finny treasures of this market, since salmon, salmon-trout and Hucho are to be obtained at Gmunden, Neusiedler-see, Platten-see, and other similar localities not far distant; but I have seen nothing of the kind, either in the market, in the bills of fare, or on private tables: I can only suppose it was owing to the season. Still the fish-market, although it present not the variety of Pisces which we see at Billingsgate, is worthy of a visit.

CUTHBERT COLLINGWOOD.

A Systematic List of Coleoptera found in the Vicinity of Alverstoke, South Hants. By ARTHUR ADAMS, Esq., F.L.S., Surgeon of H.M. Surveying Ship 'Actæon;' and WILLIAM BALFOUR BAIKIE, M.D., F.R.G.S.

(Continued from page 5555).

LAMELLICORNES.

1. Fam. CETONIADÆ, *MacLeay.*

1. Cetonia, *Fabr., Steph.*

C. aurata, *Linn., Steph.* Common; on rose bushes in gardens.

2. Fam. MELOLONTHIDÆ, *MacLeay.*

1. Phyllopertha, *Kirby, Steph.*

P. horticola, *Linn., Steph.* Occasional; on leaves of trees in shrubberies.

2. Melolontha, *Fabr., Steph,*

M. vulgaris, *Fabr., Steph.* Very abundant; flying about in the evenings during June and July.

3. Rhizotrogus, *Latr., Steph.*

R. solstitialis, *Linn., Steph.* Very numerous; flying about after sunset during July and August; seldom seen until after the disappearance of the "common chaffer."

4. Serica, *MacLeay, Steph.*

S. brunnea, *Linn., Steph.* Rarely; taken in autumn, in the copse at Grange.

5. Hoplia, *Ill., Steph.*

H. argentea, *Fabr., Steph.* Not unfrequent; on trees in plantations.

3. Fam. GEOTRUPIDÆ, *MacLeay.*

1. Ceratophyus, *Fisch.*

C. Typhæus, *Linn.* Typhæus vulgaris, *Steph.* In horse-dung; occasional.

2. Geotrupes, *Latr., Steph.*

G. stercorarius, *Linn., Steph.* Very abundant; in dung, along roadsides, &c.

G. mutator, *Marsh., Steph.* Rather common; in dung, &c.

G. sylvaticus, *Panz., Steph.* Frequent; on heaths and commons.

G. punctato-striatus, *Kirby, Steph.* Rare.

G. vernalis, *Linn., Steph.* G. lævis, *Steph.* Not common; in rabbit-burrows on Hayling Island and on Browndown.

4. Fam. SCARABÆIDÆ, *MacLeay.*

1. Onthophagus, *Latr., Steph.*

O. cænobita, *Herbst, Steph.* Rather rare; in dung.

O. fracticornis, *Fabr., Steph.* Very common; in dung.

O. nuchicornis, *Linn., Steph.* Occasional; in dung.

O. ovatus, *Linn., Steph.* Not common; in sheep's dung.

2. Copris, *Geoff.*, *Steph.*

C. lunaris, *Linn.*, *Steph.* Not uncommon; under dung in damp grass and swampy spots.

5. Fam. Aphodiidæ, *MacLeay.*

1. Colobopterus, *Muls.* Aphodius, *Steph.*

C. erraticus, *Linn.*, *Steph.* Not rare.

2. Eupleurus, *Muls.* Aphodius, *Steph.*

E. subterraneus, *Linn.*, *Steph.* Rather abundant.

3. Teuchestes, *Muls.* Aphodius, *Steph.*

T. Fossor, *Linn.*, *Steph.* Very common.

4. Ostophorus, *Muls.* Aphodius, *Steph.*

O. hæmorrhoidalis, *Linn.*, *Steph.* Common.

5. Aphodius, *Muls.*, *Ill.*, *Steph.*

A. scybalarius, *Fabr.*, *Steph.* Occasional.

A. fimetarius, *Linn.*, *Steph.* Very abundant.

A. ater, *De Geer.* A. terrestris, *Steph.* Rather common.

A. Lapponum, *Gyll.*, *Steph.* Rare.

A. terrenus, *Kirby*, *Steph.* Occasional.

A. rufescens, *Fabr.*, *Steph.* Not common.

A. lividus, *Oliv.*, *Steph.* Rather common.

A. sticticus, *Panz.*, *Steph.* Rather rare.

A. pusillus, *Herbst*, *Steph.* A. granarius, *Steph.* A. Granum, *Steph.* Common.

A. merdarius, *Fabr.*, *Steph.* Somewhat scarce.

A. melanopus, *Kirby*, *Steph.* Occasional.

6. Melinopterus, *Muls.* Aphodius, *Steph.*

M. prodromus, *Brahm.*, *Steph.* ♂. M. sphacelatus, *Steph.* ♀. Common.

M. contaminatus, *Herbst*, *Steph.* In profusion.

7. Acrossus, *Muls.* Aphodius, *Steph.*

A. rufipes, *Linn.*, *Steph.* Very common.

A. luridus, *Fabr.*, *Steph.* Frequent.

6. Fam. TROGIDÆ, *MacLeay.*

1. Ægialia, *Latr.*, *Steph.*

A. arenaria, *Fabr.* A. globosa, *Steph.* At roots of the sea-holly, in sandy spots on the banks near Fort Cumberland, and in Hayling Island.

7. Fam. LUCANIDÆ, *Leach.*

1. Lucanus, *Linn.*, *Steph.*

L. Cervus, *Steph.* In elms and ash trees about Haslar, Alverstoke and Grange; rather abundant.

2. Dorcus, *MacLeay*, *Steph.*

D. parallelipipedus, *Linn.*, *Steph.* In old trees, and under logs at Grange Farm.

STERNOXI.

1. Fam. ELATERIDÆ, *Leach.*

1. Melanotus, *Esch.*, *Steph.* Cratonychus, *Erich.*

M. niger, *Fabr.* Not common; alights on Pteris aquilina in the sun.

M. rubripes, *Herbst.* M. fulvipes, *Herbst.*, *Steph.* Rare; woods in sunny places.

2. Lacon, *Lap.* Agrypnus, *Steph.*

L. murinus, *Linn.*, *Steph.* On ferns, &c., in abundance.

3. Athous, *Esch.*, *Steph.*

A. hirtus, *Herbst.* A. niger, *Steph.* Rare; off foliage by beating.

A. hæmorrhoidalis, *Fabr.*, *Steph.* Taken abundantly by sweeping ferns.

A. longicollis, *Fabr.*, *Steph.* On Pteris aquilina; very common.

4. Campylus, *Fisch.*, *Steph.*

C. linearis, *Fabr.*, *Steph.* On flowers in the sun; Rowner Swamp and Grange Copse.

5. Diacanthus, *Latr.* Prostemon, *Steph.*

D. holosericeus, *Fabr.*, *Steph.* Taken in abundance off ferns at Grange.

6. Agriotes, *Esch.*, *Steph.*

A. Sputator, *Linn.*, *Steph.* About field-paths; very common.

A. lineatus, *Linn.*, *Steph.* Common; in fields.
A. obscurus, *Linn.*, *Steph.* Abundant; along field-paths.

7. Serricosomus, *Serv.*, *Steph.*
S. brunneus, *Linn.*, *Steph.* Hedges by beating; common.

8. Dolopius, *Esch.*, *Steph.*
D. marginatus, *Linn.*, *Steph.* Occasional; among herbage, Grange.

MALACODERMATA.

1. Fam. ELODIDÆ, *Shuck.*

1. Elodes, *Latr.* Cyphon, *Steph.*

E. pallidus, *Fabr.* E. melanurus, E. lætus, *Steph.* Hedges by sweeping; not common.

E. lividus, *Fabr.*, *Steph.* E. testaceus, E. assimilis, E. obscurus, *Steph.* Copses; common.

E. griseus, *Fabr.*, *Steph.* Hedges; occasional.
E. Padi, *Linn.*, *Steph.* E. ater, *Steph.* Hedges; rather common.
E. ochraceus, *Steph.* Not frequent.

2. Scirtes, *Ill.*, *Steph.*

S. hemisphæricus, *Linn.*, *Steph.* Beaten off sedges in a marsh near Privet; rare.

2. Fam. LAMPYRIDÆ, *Kirby.*

1. Lampyris, *Linn.*, *Steph.*
L. noctiluca, *Linn.* Rare; roadsides at Elson.

3. TELEPHORIDÆ, *Leach.*

1. Telephorus, *Oliv.*, *Steph.* Cantharis, *Schaum.*

T. fuscus, *Linn.*, *Steph.* In hedges; frequent.

T. rusticus, *Fall.*, *Steph.* On flowers and in grass during summer; most abundant.

T. lividus, *Linn.*, *Steph.* On Apiaceæ; abundant.
T. bicolor, *Fabr.*, *Steph.* On flowers; not uncommon.
T. fulvicollis, *Fabr.*, *Steph.* Occasional.
T. thoracicus, *Oliv.*, *Steph.* Not unfrequent.
T. clypeatus, *Ill.*, *Steph.* Not common.
T. lituratus, *Gyll.*, *Steph.* Among grass in meadows; occasional.

2. Rhagionycha, *Esch.*, *Steph.*

R. melanura, *Fabr.*, *Steph.* In profusion, chiefly on umbelliferous flowers.

R. testacea, *Linn.*, *Steph.* In hedges, by sweeping; common.

R. pallida, *Fabr.*, *Steph.* In hedges, by sweeping; occasional.

3. Malthinus, *Latr.*, *Steph.*

M. fasciatus, *Fallen.*, *Steph.* On hawthorn flowers.

M. flaveolus, *Payk.*, *Steph.* In hedges, by sweeping.

M. biguttulus, *Payk.*, *Steph.* In hedges, by sweeping.

3. Fam. MELYRIDÆ, *Leach.*

1. Malachius, *Fabr.*, *Steph.*

M. æneus, *Linn.*, *Steph.* On apiaceous flowers; occasional.

M. bipustulatus, *Fabr.*, *Steph.* On flowers, especially of Spiræa ulmaria.

M. viridis, *Fabr.*, *Steph.* On herbage; less abundant.

M. marginellus, *Fabr.*, *Steph.* Rare; on flowers in Rowner Swamp.

M. rubricollis, *Marsh.*, *Steph.* Hedges, by sweeping; rare.

2. Dasytes, *Fabr.*, *Steph.*

D. cæruleus, *Fabr.*, *Steph.* On flowers; rare.

D. æratus, *Steph.* Rare.

3. Byturus, *Latr.*, *Steph.*

B. tomentosus, *Fabr.*, *Steph.* On bramble blossoms; common.

4. Telmatophilus, *Heer.*

T. Sparganii, *Ahr.*, *Steph.* On blossoms of Sparganium ramosum; tolerably abundant.

4. Fam. TILLIDÆ, *Leach.*

1. Corynetes, *Herbst.* Necrobia, *Latr.*, *Steph.*

C. cæruleus, *De Geer.* In carcases near the shore.

C. rufipes, *Fabr.*, *Steph.* In carcases near the shore; not frequent.

C. ruficollis, *Fabr.*, *Steph.* In carcases near the shore; rare.

5. Fam. PTINIDÆ, *Leach.*

1. Ptilinus, *Geoff.*, *Steph.*

P. pectinicornis, *Linn.*, *Steph.* Taken on a window-sill at Southsea by Mrs. Livesay.

2. Dorcatoma, *Herbst*, *Steph.*
D. Bovistæ, *Ent. H.*, *Steph.* In some abundance from puff-balls in fields near Alverstoke.

3. Hedobia, *Sturm.* Ptinus, *Steph.*
H. imperialis, *Linn.*, *Steph.* In old hedges; rare.

4. Ptinus, *Linn.*, *Steph.*
P. hololeucus, *Fald.* Occasional; in houses.
P. Fur, *Linn.*, *Steph.* Frequent; in old houses.

6. Fam. ANOBIIDÆ, *Westw.*

1. Anobium, *Fabr.*, *Steph.*
A. tesselatum, *Fabr.*, *Steph.* In plenty, in the decayed interior of some old oaks at Grange.
A. striatum, *Oliv.*, *Steph.* Common; in houses.

2. Apate, *Fabr.*
A. ——? Introduced.

3. Lyctus, *Fabr.*, *Steph.*
L. canaliculatus, *Fabr.* L. oblongus, *Steph.* In old oak palings at Alverstoke.

4. Cis, *Latr.*, *Steph.*
C. Boleti, *Scop.*, *Steph.* In dead Boleti; occasional.
C. hispidus, *Payk.*, *Steph.* Scarce.
C. bidentatus, *Oliv.*, *Steph.* In Boleti; abundant.

HETEROMERA.

I. MELASOMATA.

1. Fam. BLAPSIDÆ, *Leach.*

1. Blaps, *Fabr.*, *Steph.*
B. mortisaga, *Linn.* In cellars and graveyards; common.

2. Fam. OPATRIDÆ, *Shuck.*

1. Heliopates, *Dej.* Phylan, *Steph.*
H. gibbus, *Fabr.*, *Steph.* Not common; sandy banks near Fort Cumberland and at Hayling Island.

2. Opatrum, ***Fabr.*, *Steph.***

O. sabulosum, ***Linn.*, *Steph.*** Rather common; sandy places in Stokes Bay and Hayling Island.

3. Microzoum, ***Redt.*, *Steph.***

M. tibiale, ***Fabr.*, *Steph.*** Burrowing in sand near the shore in Hayling Island.

3. Fam. TENEBRIONIDÆ, *Steph.*

1. Tenebrio, ***Fabr.*, *Steph.***

T. obscurus, ***Fabr.*, *Steph.*** Occasional; in houses.

T. Molitor, ***Linn.*, *Steph.*** Occasional; in houses and ovens.

4. Fam. HELOPIDÆ, *Steph.*

1. Helops, ***Fabr.*, *Steph.***

H. cæruleus, ***Fabr.*, *Steph.*** On old trees and palings, in gardens and orchards; tolerably frequent.

H. caraboides, ***Fabr.*** H. striatus, ***Steph.*** In old trees, in fissures of bark; occasional.

5. Fam. CISTELIDÆ, *Leach.*

1. Cistela, ***Fabr.*, *Steph.***

C. murina, ***Linn.*, *Steph.*** On flowers; rather common.

6. Fam. LAGRIIDÆ, *Westw.*

1. Lagria, ***Fabr.*, *Steph.***

L. pubescens, ***Linn.*** L. hirta, ***Steph.*** Common; on flowers.

7. Fam. PYROCHROIDÆ, *Leach.*

1. Pyrochroa, ***Geoff.*, *Steph.***

P. rubens, ***Fabr.*, *Steph.*** On flowers and herbage; tolerably frequent.

8. Fam. NOTOXIDÆ, *Steph.*

1. Notoxus, ***Geoff.*, *Steph.***

N. monoceros, ***Linn.*, *Steph.*** At roots of coarse grass in sandy places near Southsea; scarce.

2. Anthicus, ***Payk.*, *Steph.***

A. floralis, ***Fabr.*** A. fuscus, ***Steph.*** On flowers; not common.

A. antherinus, *Linn.*, *Steph.* On flowers; rare.

A. ater. Two specimens swept off grass in the Salterns, Island of Portsea, in October, 1856.

9. Fam. MORDELLIDÆ, *Leach.*

1. Anaspis, *Geoff.*, *Steph.*

A. frontalis, *Linn.*, *Steph.* On bramble blossoms; tolerably frequent.

A. ruficollis, *Fabr.*, *Steph.* On flowers in Rowner Swamp; common.

A. fasciata, *Forst.*, *Steph.* A. nigricollis, *Marsh.* Common.

A. flava, *Linn.*, *Steph.* On willow catkins; occasional.

10. Fam. CANTHARIDIDÆ, *Leach.*

1. Meloë, *Linn.* Proscarabæus, *Steph.*

M. Proscarabæus, *Linn.* M. vulgaris, *Steph.* Among furze and grass on commons.

M. violaceus, *Marsh.*, *Steph.* Among furze and grass on commons.

2. Lytta, *Linn.* Cantharis, *Steph.*

L. vesicatoria, *Linn.*, *Steph.* Taken rarely near Stokes Bay.

11. Fam. ŒDEMERIDÆ, *Leach.*

1. Nacerdas, *Schaum.* Ischnomera, *Steph.*

N. melanura, *Linn.*, *Steph.* Not common.

2. Œdemera, *Oliv.*, *Steph.*

Œ. Podagrariæ, *Linn.*, *Steph.* One specimen taken at Grange.

Œ. cærulea, *Linn.*, *Steph.* Common; on flowers, especially of wild roses.

12. Fam. SALPINGIDÆ, *Leach.*

1. Rhinosimus, *Latr.* Salpingus, *Steph.*

R. planirostris, *Fabr.*, *Steph.* Under bark of felled trees at Grange; rare.

WM. BALFOUR BAIKIE.

Larva of Colias Hyale.—A female of this species deposited some eggs on my setting-board, although I had poisoned her with oxalic acid; they duly hatched in five days, and have since fed on Medicago sativa, Trifolium repens and T. subterraneum; they are now feeding on the last-named plant. They are of a yellowish green colour; head small in proportion to the body. When in a state of repose they lie along the middle of the leaf's superior surface, so that at night, when the leaf closes (as most, if not all, the Trifolia do), they are quite inclosed by its segments, showing the all-wise provision of our Creator, in guiding the delicate larva to seek such a beautiful and effectual domicile, from the cold, cutting winds it would otherwise be exposed to: the edges of the leaves meeting quite close together, they appear almost hermetically sealed in. They appear to have the power of ejecting their excrement with some degree of force, for although they never leave the food-plant, being very sluggish in their habits, I find it nearly an inch above them, adhering to the glass lid of the breeding-cage, which by chance had a little spun silk on it.—*William Henry Tugwell; 112, Cheapside, London, September* 8.—*From the 'Intelligencer.'*

Lycæna Hippothoë in Scotland.—Whilst botanizing over a marshy piece of ground in this neighbourhood, I was surprised to see a male specimen of this beautiful butterfly flit past me while I was arranging some plants I had just gathered. Being aware of its rarity, I was soon up and in pursuit; but, from my great weakness and the treacherous character of the ground, I was unable to capture it, although it settled several times in full view. I repeatedly fell in stagnant pools concealed by the tall reeds and grasses, and at last was so completely tired that I gave up the chase, hoping the insect would return another day, but that day has never arrived. — *Thomas Edward; Banff, August*, 1857. [It seems to me that Mr. Edward can hardly be mistaken as to the species. The most likely way to procure it would be to search the leaves of the water-dock for the larva wherever that species occurs in the fen district in his neighbourhood.—*E. N.*]

Sphinx Convolvuli at Stoke Newington. — I have just received a beautiful male of Sphinx Convolvuli taken hovering over flowers at Stoke Newington. Callers here speak of numerous similar captures. Can no one find the larva of this beautiful Sphinx? It would be a very conspicuous object; and if its occurrence bear a proportion to the imago similar to that in Sphinx Ligustri, it must also be profusely abundant. The captures of the larvæ of Ligustri, compared with those of the imago, are as 100 to 1. What a host of Convolvuli larvæ would this give!—*Edward Newman.*

Sphinx Convolvuli at Kingston.—A very fine female of this species was brought to me on Monday last, taken that day on Surbiton Hill, near this town. A little benzine collas soon put an end to its existence. — *A. F. Sheppard; Rutland House, Kingston-on-Thames, October* 9, 1857.

Note on Anthrocera Trifolii and A. Filipendulæ. — In a field at Keymer, near Hurstpierpoint, I observed these two species flying together, the former rather worn, and the latter just appearing from the pupa. Upon examining more closely I discovered several males of Trifolii *in copulâ* with females of Filipendulæ. It occurred to me that probably this irregularity had not then taken place for the first time, and I therefore searched the spot very carefully for hybrids, of which I soon took several, though not in good condition, as most of the specimens were more nearly allied to Trifolii than to Filipendulæ, and had therefore, as it was then late in June, been some time on the wing. In some cases the specimens showed the narrow border of the under wings of Filipendulæ, but with only five spots; others strongly resembled

Trifolii, but with the six spots of Filipendulæ. I have known the locality well ever since I have collected, and am quite certain that the two species have become common there only as the result of the improved drainage of the flourishing district in which I found them. Until recently Trifolii was very scarce there, and Filipendulæ occurred about in the proportion of one to a hundred at the present time. I mention this fact because it is satisfactory to think that cultivation in some cases is of advantage even to the entomologist.—*J. Jenner Weir; 6, Haddo Villas, Blackheath, S.E., October*, 1857.

Positions of Lepidoptera. — The ordinary position of insects, whether at rest or in motion, is worth very attentive examination. We have all learned from Linneus that butterflies rest with their wings erect, moths with their wings deflexed; but how many years have passed away without our adding a jot or tittle to this fragment of knowledge! We may fairly assume that every natural group of Lepidoptera has its distinctive characters while living: we have only to observe them. Thus, a Geometer always exhibits its hind wings when at rest; if a Eupithecia, the entire hind wing is exposed; in other Geometers some portion is concealed. Again, if you start a Geometer and see it settle on a fence, it will almost invariably run with its wings erected and meeting above its back like a butterfly at rest; before going to sleep again it will give two or three flaps with its wings and then expand them, appressing them as closely as possible to the paling. No other Macro-Lepidopterous insect runs with erected wings; I will say nothing of the Micros. Then how strange is the attitude of a Pterophorus at rest; the narrow wings standing at right angles with the body, the entire body exposed; not a particle of it can by any possibility be concealed by the wings; and then the hind legs, jauntily cocked up in the air, like the little finger of a lady of the olden time, as though far too delicate and graceful to be of any use, and only to be worn for ornament; indeed, these said hind legs of Pterophorus are often crossed over the abdomen and rest there, as though not only not intended for use, but as being actually too delicate to bear their own weight.—*Edward Newman.*

How to rear the Death's Head. — I have been very successful in breeding Acherontia Atropos; the method I have adopted is this: I feed the larvæ in large flower-pots half-filled with light mould for them to effect their transformations in; after they have been under ground ten days, I take them out, and put them in pots partly filled with mould and sand, and well drained. I keep them in a warm room, and well saturate them with water once a week; to keep up the moisture I put damp moss over them every third day. In this way I have bred fourteen as fine specimens as ever were seen, some of them 5½ inches across the wing. One of them was only three weeks from the larva going under ground to the appearance of the perfect insect, but I find a month about the average time. It is time that entomologists should be on the look out for A. saucia and A. australis: I took a few specimens of both a fortnight ago.—*H. Rogers; Freshwater, Isle of Wight, September* 30.—*From the 'Intelligencer.'*

Note on Cerura bicuspis. — I found a number of the deserted dwellings of Cerura bicuspis yesterday, the 7th. Was it not a day of humiliation? — *John Scott; Southfield Villas, Middlesbro'-on-Tees, October* 8, 1857.

Petasia nubeculosa in Scotland. — Although the modesty of our collectors will doubtless be in some degree outraged by the publication of the successful result of their most meritorious labours, I feel compelled, as an impartial chronicler of entomological events, to state that an unusual number of this most desired species have been taken during the past summer. The specimens are in remarkably good condition; and I would recommend the posessors to adjust the price to the increased supply, in which case every lepidopterist will become a willing purchaser.—*Edward Newman.*

Double-broodedness of Notodontæ.—The discussion which took place in the pages of the 'Zoologist' last year on the double-broodedness of the Notodontæ did not appear likely to produce any satisfactory result until additional data were obtained. I had at that time about seventy pupæ of N. ziczac, the produce of autumnal moths, which were obtained from the spring brood, and which I determined to apply to obtaining additional data. The imago from these began to emerge the beginning of May, and by the end of that month they had ceased to appear. About the latter end of June I carefully examined every cocoon, and found six pupæ dead; the moths from four others had got entangled in the cocoon, and were also dead; the rest had emerged; not one remained over. When the sexes met, these moths invariably paired, and supplied about sixteen hundred eggs, most of which were distributed; and I learn that several of my correspondents secured from them the autumnal brood, and have now a good store of pupæ. I continued my own experiments by selecting eggs from various batches; and again, in July, I had about fifty pupæ, the moths from which emerged during the last week in that month and the first week in August. When these had for some time ceased to appear I again carefully examined the cocoons, and found one shrivelled pupa, and two moths entangled and dead; all the others had emerged. This last brood always paired when allowed to do so, and produced fertile eggs. Surely Mr. E. Shepherd will admit that these experiments have been on a sufficiently extended scale, and will not, in reference to them, speak about one swallow not making a summer. It may not be out of place here to add that I do not find, as in Mr. Doubleday's case, the autumnal brood "small and faint in colour;" they are quite equal in size and intensity of marking to the spring brood; indeed, I see no difference whatever. The larvæ in both cases were reared on growing plants from the moment they left the eggs, and were not removed into confinement until indications of change to pupa appeared. A few words about Notodonta dictæa:—Mr. Doubleday says (Zool. 5166) that he "never saw an autumnal specimen of Carmelita, trepida, dictæa or dictæoides." I have now (August 29) a female dictæa busy laying her eggs; she was bred from a larva taken full-grown at the end of July; at the same time I took six smaller ones; and in another part of the country I took five more, besides a male attracted by the female above mentioned. Thus thirteen instances of the second brood of dictæa, the produce of at least four or five maternal parents, have casually fallen to one collector the same year. The autumn brood does not, therefore, appear so rare as Mr. Doubleday's remark would imply. Here, also, is the proof asked for by Mr. E. Shepherd, namely, that the spring moths are the parents of the autumn-produced individuals: he admits (Zool. 5293) that if this be proved the chain of evidence is complete. Mr. C. R. Bree informs me that he has "some fresh-turned pupæ of dictæa, the produce of a female reared from eggs laid by another female in May." It will be seen from the above facts that the two broods of both N. ziczac and N. dictæa are fertile. Now, Mr. Doubleday says (Zool. 5765), and Mr. Newman "exactly coincides" with him:—"I believe the females of some species are mostly barren when disclosed in the autumn, but when there are two distinct broods of a species, a vernal and autumnal brood, both are fertile." If, then, where there are *not* two distinct broods the autumnal disclosures are barren, and where there *are* two distinct broods both are fertile, it follows that, ziczac and dictæa appearing in spring and autumn, and both disclosures being fertile, these species are therefore double-brooded. PS.—Since writing the above I have taken a number of larvæ of P. palpina which have duly changed to pupæ. I hope to extend my experiments to this insect: I feel satisfied it is double-brooded.—*George Gascoyne; Newark, September*, 1857.

Phlogophora empyrea in Sussex.—This beautiful species has again occurred in its well-sugared localities, and in unusual numbers. The specimens are in splendid condition, but the males are more worn than the females. As is the case with most of our moths, the males are more prone to take wing than the females. I trust our Lewes entomologists will take the opportunity, which this abundant harvest affords, to supply liberally the cabinets of their friends.—*Edward Newman.*

Occurrence of Xanthia centrago at Leicester.—A living specimen of this insect was taken by my little boy in the Leicester Museum the latter end of August last. Finding it mentioned as a very rare species, this notice may possibly be worth inserting in the 'Zoologist.'—*J. E. Weatherhead; Town Museum, Leicester, September* 28, 1857.

Pœcilochroma stabilana, St.—During the last few days I have taken a series of the above very distinct species from alder bushes. The other species in this genus run into the most extraordinary varieties: this scarcely varies at all, which is no doubt the reason why the late Mr. Stephens fixed upon the appropriate name of stabilana. It is a large and more robust insect than the other species; the males are of a shining pale brown, the females of a dark brown colour, with a paler oval patch in the middle of the inner margin, which in both sexes is bordered with very dark brown spots, but especially so in the female.—*R. S. Edleston; Bowdon, October* 9, 1857.

Nepticulæ at Bowdon.—

Atricapitella
Aucupariæ
Ruficapitella
Anomalella
Pygmæella
Oxycanthella
Prunetorum
Viscerella
Septembrella
Subbimaculella
Trimaculella
Floslactella
Salicis
Microtheriella
Ignobilella
Argentipedella
Plagicolella
Tityrella
Malella
Angulifasciella
Gratiosella
Marginicolella
Aurella
Regiella
Weaveri
Atricollis
Alnetella
Betulicola
Myrtillella

During the present season I have bred the above species of Nepticula, and possess several others, in single specimens or pairs, which it would be premature to describe till I become acquainted with the larvæ. Next June I hope to breed them. Chestnut trees are tenanted by three, if not four, distinct species. Last season I could not find a single mine tenanted: this season I have been rather more successful. All the three species are excessively scarce: the first is a small blotch miner, formed by a pale green larva, which spins a brown cocoon; the second is a long spiral mine, three inches in length, excrement black in centre of mine, larva yellowish green, and forms a drab cocoon; the third is a visceriform miner, and, so far, never at home. What may produce a fourth is a pale green larva, with brown head, and, when young, mines along the midrib, discolouring the leaf, afterwards forming a small blotch mine: I collected several of these a few days ago. Mountain ash is tenanted by another species besides Aucupariæ, with a very peculiar compressed spiral mine, and dark yellow larva: I found four of them, for the first time, this afternoon. Last season I met with Vimineticola, very rare, in osiers, but failed in breeding them. Most of the Nepticulæ are said to be double-brooded: my short experience inclines me to the opinion of a succession of broods. From June to October the larvæ of several species are always to be found. Plagicolella, like subbimaculella, has the singular habit of several larvæ, occasionally occurring in a single blotch mine. Among the singular freaks met with in this genus may be mentioned the following:—A month ago I placed a large birch leaf, tenanted by ten full-grown argentipedella, in a glass jar. A few days ago I examined this leaf: the former tenants had left and spun their cocoons, and the leaf was now occupied by nine nearly full-fed Betulicola, traversing the leaf in all directions. Of course the eggs were upon the leaf when I got it, but unobserved. We constantly meet with one or more larvæ in a leaf apparently not large enough to supply them with food. Strange to say, in the case I have mentioned, the perfect insects were quite as fine as others with a whole leaf to themselves. Of all the Nepticulæ, Weaveri is the most extraordinary. The singular appearance of the leaf of Vaccinium Vitis-Idæa when the larva is full-fed, with the cocoon inside the leaf, and elongated and lying between an upper and lower layer of silk, is a marvel of workmanship. The insect is exceedingly difficult to rear. I collected a sufficient number of full-grown larvæ, had they produced moths, to have supplied most collections with specimens. I bred some three dozen only, which were most irregular in their appearance, from June 21 to August 24. Had ichneumons made their appearance it would have been satisfactory in accounting for my mishap. On opening the cocoons the great bulk contained a shrivelled larva, which had apparently died of utter exhaustion in spinning these astounding cocoons. — *R. S. Edleston; Bowdon, September* 26, 1857.

Natural History of Nemotois Dumerilellus.—The case, which is very similar to that of Nemotois violellus, is found in spring (April) on the dry slopes of our Douanberg, so well wooded above: it keeps much concealed on the ground amongst grass and other low plants, especially where Hieracium Pilosella grows abundantly. The larva does not appear very particular in its eating, and devours readily the blossoms of several low plants. In captivity they first gnawed the lower and rather dry leaves of Hieracium Pilosella; afterwards I offered them the blossoms of several early flowering plants, Gentiana verna, Anemone nemorosa, and later Helianthemum vulgare, which they ate with avidity. They were always very sluggish and well concealed. In the beginning of June they assumed the pupa state, when the cases were almost buried in the earth or amongst the roots of grass, so that only one end of the case was visible. The perfect insects appear towards the end of June; our two specimens came out on the 23rd and 25th of June. As in Nemotois violellus, the pupa-skin protrudes a long way out of the case. Probably the larva of Nemotois Dumerilellus feeds in autumn, in a juvenile form, in the fructification of some low plants perhaps of Hieracium, and afterwards forms a case in which it winters on the ground.—*Ottmar Hofmann; Ratisbon, September* 1.—*From the* '*Intelligencer.*'

Beware of the Wasps.—A few evenings ago I started with an un-entomological friend to beat some ivy for moths, expecting, from the nature of the evening and the bloom on the ivy, an abundant harvest. My friend held an inverted umbrella under the bushes: I thrashed away with a stick. Down came blossoms, leaves, and divers creeping things, to the great delight of my friend, who believed that they were one and all lepidopterous. On inspecting our prize with a lantern I found that beyond a perfect swarm of wasps there was scarcely a living thing. My friend, however, was not to be deceived, and, observing something creeping up the umbrella, he seized it in his hand, exclaiming, "Here we are: I've got one!" The next instant a yell of agony apprized me of what had occurred. I hope others will be more fortunate, but my friend and I had quite enough of ivy-hunting for one night. We were quite covered with the "woppses."—*T. Vaughan Roberts; Oswestry, October* 13, 1857.

Sirex Juvencus and the Bullets.—The French papers have lately reported that a great number of bullets have been found with cylindrical holes drilled in them, and that the said phenomenon, having been submitted to scientific men, these holes have been identified as the work of an insect, which has been actually found in some of them, and that the insect has been pronounced by entomologists to be Sirex Juvencus. Whatever may have been the fact in a solitary instance, no entomologist will give the insect credit for preferring the mineral to the vegetable world, and for feeding on bullets in preference to deal. I have met with two or three instances in which Callidium Bajulus had absolutely gnawed its way through the sheet-lead covering a roof; but this I imagine to be nothing more than the exemplification of the energy displayed, by men and animals in general, to escape a prison house.—*Edward Newman.*

Characters of Zuphium olens of Latreille, drawn from a single Specimen found near London.—Head exserted, separated from the prothorax by a distinct but short and very narrow neck, rounded posteriorly, intensely black, brilliantly glabrous; clypeus, mouth, palpi and antennæ ferruginous; the maxillary palpi quite as long as the head, the terminal joint long, slender, slightly incrassated exteriorly and obliquely truncate; antennæ long and slender, the basal joint stouter than the rest, quite as long as the head, and perfectly concolorous. Prothorax rather wider than the head, cordate, the posterior margin narrowed, truncate, the angles acute and slightly salient, the disk very finely and confluently punctured, and having a wide median longitudinal depression; the lateral margins narrowly reflexed; the colour ferruginous. Elytra rather wider than the head, depressed; they have nine wide, shallow and somewhat inconspicuous striæ, and are uniformly covered with very minute confluent punctures; the lateral margins are narrowly reflexed, and in the groove caused by the flexure are about ten large deep punctures, half of them situate near the humeral angle, and the other half near the outer angle of the slightly sinuous truncate apex: the colour of the elytra is dusky brown, with a slightly iridescent tinge, a large, bright ferruginous patch occupying the base of each, and a third smaller and nearly circular patch or spot of the same colour occupying the apical extremity of the suture. All the legs are ferruginous. The length of the specimen, exclusive of the antennæ, is four-tenths of an inch, and the breadth one-tenth. It will be seen from this description that the insect does not agree with Fairmaire's characters; indeed, it differs so materially as at first to induce a belief that a species new to Science had been discovered; but on comparison with European examples in the British Museum no doubt remains as to the identity of the species. The specimen was found near London, on the 19th of September, 1857, and is now in the cabinet of the Entomological Club.—*Id.*

Note on certain nearly-allied Dromii.—As it seems possible that more than a single species of Dromius may have been confounded, in British cabinets, under the name of "agilis," perhaps the following memorandum, which I made a few months ago whilst examining continental (typical) specimens of D. agilis, fenestratus and testaceus, may be useful to some of our coleopterists. The note, extracted *verbatim* from my papers, is as follows: — "Apart from the elongated and conspicuous pale dash on the disk of each of its elytra (which is rarely absent), D. fenestratus may be known from agilis by being altogether a little larger and broader (this being especially observable in its head and prothorax, the latter of which is considerable wider and more transverse than in agilis), and by its having only a single series of punctures, and that almost (if not entirely) obsolete, down each of its elytra; whereas in agilis there are *two* rows, regular and well-defined. D. testaceus is nearly of the same form and size as agilis, but is perhaps a little slenderer and more straight in its outline; its prothorax is a trifle smaller, and less expanded at the sides; its colour is altogether paler and more testaceous, and the inner row of its elytral impressions is obsolete." I may add, moreover, that Dr. Schaum, of Berlin, writes me word that he is perfectly satisfied that fenestratus is a true species, and no variety or state of agilis; and although I had no occasion to interrogate him concerning testaceus also, it likewise, judging from his volume in the 'Deutschlands Fauna' just published, appears to be still recognized, in Germany, as specifically distinct. I should state, however, that amongst my own British Dromii of this peculiar type, and which were principally collected near Cambridge, I am not able to detect anything but the common agilis. — *T. Vernon Wollaston*; 10, *Hereford Street, Park Lane.*

Destructive Powers of Galeruca Capreæ. — I have been consulted by no less than eight applicants on the subject of a small beetle which has this year caused immense loss to the osier-growers at and near Hitchin, in Hertfordshire. On carefully examining the insect and its food, I find it to be Galeruca Capreæ, and the main injury to be occasioned by the perfect insect denuding of bark the tips of all the new shoots. The eggs are laid in masses on the young leaf, which the larvæ voraciously devour and skeletonize; the pupæ are attached by the tail, and the imago feeds indiscriminately on the leaves and bark, in the latter case inflicting the greater injury. In one osier-bed the damage occasioned exceeds a hundred pounds.—*Edward Newman.*

Earwigs and Cayenne. — The compounds to which we apply the general epithet Cayenne pepper are so various, both in the nature and proportion of ingredients, that we must not found any theory on the fact of an insect having been once found devouring a compound bearing this name. Still the following fact may be worth recording. My friend Mr. Hart, of Bath, observed one day, in a small stoppered cruet, the usual receptacle of so-called "Cayenne," two earwigs, of normal size and form, apparently enjoying themselves to the top of their bent. The fact was communicated to me by letter, and, probably influenced by that doubting disposition which has been the means of reducing British Lathonias to a mere drug, of banishing at least a thousand Virgaureæs, and Chryseis innumerable, from our collections, I requested to be indulged with ocular demonstration of the phenomenon. My wish was politely complied with, and the long-imprisoned earwigs arrived in safety. I sacrificed one of them in the cause of Science, and found its abdomen distended with the substance contained in the cruet. I also found that a great portion of this substance, converted into pellets of more uniform size and paler colour than the rest, had actually been converted into earwig fraas. No information can be obtained as to the time or mode of the earwigs entering the cruet; it is certain, however, that they remained there several weeks, apparently in the enjoyment of excellent health, despite the occurrence of an occasional shaking up by the *savans* of the renowned city in which the phenomenon was discovered.—*Id.*

The Locust at Hull. — For some short time past many specimens of the locust (*Gryllus migratorius*) have been captured in this neighbourhood. One very fine specimen was caught by my gardener flying over a bed of Verbenas. In order to kill it I tried the air-pump. After being under the exhauster for some few minutes, it fell on its side, and appeared to be quite dead. It was left thus for nearly an hour, when, on admitting air again, a slight motion of the legs and antennæ showed that it was not quite killed. A little cyanide of potassium was now introduced by puncturing the thorax with a penknife, and letting a drop of the saturated solution of this salt fall on the aperture. This plan seemed to work well, for it appeared to be dead immediately. On the 28th instant I had another locust brought me by one of the sea pilots. It had been captured at sea, the same day. On turning it out of the glass where it had been kept, it turned out to be a specimen of death's-head hawk-moth (*Acherontia Atropos*). When teased it became much irritated, and continually uttered its peculiar stridulant cry.—*George Norman ; Hull, September* 30, 1857.

Abundance of the Locust at Boulogne-sur-Mer.—Being at Boulogne from the 16th to the 20th of September, for the purpose of collecting Actiniæ for my aquaria, I observed hundreds of the migratory locust (*Locusta migratoria*) on the down above the cliff in the vicinity of Boulogne. — *Thomas Hall ; 75, London Wall, September* 21, 1857. [Owing, doubtless, to the heat of the past summer, the north-westward migration of the locust has been more observable than for many years past. The Straits of Dover have formed a natural barrier, preventing its coming to England in excessive numbers.—*E. N.*]

Honey Buzzards in Norfolk. — No less than five of these occasional visitants have been lately observed in this county. On the 25th of August two males in adult plumage were shot at Northrepps, and another was seen but not obtained. These birds exhibited, both on the upper part and sides of the head, the gray plumage of the full adult, and are the more worthy of remark since I believe, out of the many specimens that have occurred from time to time in this county, not more than one or two have been met with in other than immature plumage. A young female was killed at Salhouse on the 28th of the same month, and another, also immature, was taken at Woodbastwick on the 7th of September. About the same time a sixth specimen was shot at Flixton, in Suffolk.—*H. Stevenson ; Norwich, September*, 1857.

Snowy Owls in the Western Islands.—No less than five specimens of the snowy owl (*Strix nyctea*) have been shot this year in the Western Islands, all of them, I believe, by Mr. Millbank ; I am not certain whether in Lewis or Sky.—*David Graham ; Market Street, York, September* 21, 1857.

Nesting of the Lapland Owl (Strix lapponica, *Temm.*) *and Tengmalm's Owl* (S. Tengmalmi, *Gmel.*) — Two nests of the Lap owl were found in Finnish Lapland in 1856. In one near Sodankyla there were two eggs, and when one of the birds was shot a third egg was found ready for exclusion. They were placed on the jagged end of the stump of a large Scotch fir, about twelve feet from the ground, at which spot the tree had been snapped across by some storm, the upper part not yet entirely separated, but sloping downwards till the greater part of its weight was supported by the ground. The other nest was near the Aunasjoki, at the top of a lowish Scotch fir. Some time previously in the same year a bird had been shot at this spot, which was found to be a female with eggs inside. The nest was not observed until after the shot was fired. At the second visit, on the 28th of May, there were two eggs in the nest, and again a bird was shot, which turned out to be a new female with a fully-formed egg inside, through which the bullet had passed. The skin is now in England. The birds seemed on both occasions remarkably fearless. The eggs are smoother, and, as might be expected, considerably smaller than those of the eagle owl. The dimensions of the two in the last-mentioned nest are 2 in. × 1·6 in. and 2·1 in. × 1·65 in. At the meeting of Scandinavian naturalists in Christiania last summer, before I heard of these two nests having been found, I was able to announce that the Lap owl generally makes its nest on the top of a stump. I had received several reliable accounts from different woodsmen, but had never found a nest myself, or been able to get the eggs, which indeed have, I believe, hitherto been unknown to ornithologists. It appears that three is the ordinary number of eggs. Tengmalm's owl lays its eggs in holes of trees and occasionally in egg-boxes. When once established it cannot easily be made to leave its quarters, and it can, as it is said, keep possession against a much larger bird; yet from the present nest (the only one I have had the good fortune to meet with), after having laid four eggs, the mother was ejected by a golden eye. The dimensions of the egg accompanying this paper are 1·32 in. × 1·5 in.—*John Wolley; Muoniovara, February* 2, 1857.

Occurrence of the Rosecoloured Pastor (Pastor roseus) *in Scotland.*—The rose-coloured pastor has again made its appearance in our neighbourhood, a young male having been killed here three weeks ago. Owing to his youth, he wanted a great deal of that beauty which distinguishes the adult male.—*Thomas Edward; Banff, September* 18, 1857. [Several other specimens have been recorded in the newspapers as having been shot or seen in their southward passage at the beginning of September. —*E. N.*]

Occurrence of the Lesser Whitethroat (Sylvia curruca) *at Scilly.*—The same packet which brought over the brown snipe brought also another bird new to Cornwall in the lesser whitethroat, which I have just examined. It appears to be an adult bird, and it is the first example that has come to my knowledge as having occurred in any of the western counties.—*Edward Hearle Rodd; Penzance, October*, 1857.

Note on the Nidification of the Swallow (Hirundo rustica).—I have seen at Pembury the nest of the swallow under the eaves of a house. Unlike that of the martin (*Hirundo urbica*), the nest was not attached or closed at the top, but supported underneath by the bend of a zinc water-spout.—*J. Jenner Weir; 6, Haddo Villas, Blackheath, S.E., October*, 1857.

The Land Rail (Gallinula crex) *in Scilly.*—Amongst other well-known migratory birds that have appeared in large numbers at Scilly during the last few days was the land rail. A friend writes me that he bagged in one day eight couple, and killed one couple besides; and that nearly every tuft of long grass in the swamps and morasses were safe in holding two. They mostly appeared in pairs.—*Edward Hearle Rodd; October*, 1857.

Occurrence of Temminck's Stint (Tringa Temminckii) *at Scilly.*—Mr. Pechell has observed several of these diminutive stints at Scilly, and he writes me word that he shot two this week.—*Id.*

Occurrence of the Brown Snipe (Scolopax grisea) *at Scilly.*—I have just examined a very interesting specimen ef the above rare bird, in immature plumage, killed among the past week by Augustus Pechell, Esq., at Scilly. The exact locality I am not made acquainted with, nor, in fact, with any particulars. This is an addition to our Cornish Fauna, and a valuable bird, as a rare species, anywhere in England. The description of this example I give briefly, for the benefit of your readers:—Bill, length 2¼ inches, dilated at the tip, very rugose. Top of the head dark brown; a dusky streak from the corners of the mouth to the eye; above this a broad white streak, extending, in an indistinct form, over and to the back part of the eye. Neck smoke-gray, palest in front. Breast and belly white, with a strong shade of yellow buff. Primaries dark, shaft of first quill-feather white; secondaries hair-brown, broadly edged at their tips with white. Feathers on the back and scapulars black, edged with rust-red. Tail and upper tail-coverts elegantly barred with narrow black and white lines; under tail-coverts and flanks the same, but fainter; wing-coverts cinereous, the centre of the feathers darker.—*Id.*

The Great Snipe (Scolopax major) *shot near York.*—A very fine specimen of the great snipe was sent to me for preservation on Saturday last, the 19th instant. It was shot about three miles from York, at a place called Askham Bog, and was flushed in company with some of the common snipe. It was one mass of fat, and weighed nine ounces.—*David Graham; Market Street, York, September* 21, 1857.

Food of the Storm Petrel.—In the 'Zoologist' for last month (Zool. 5799) I see a query as to what is the seed of the gulf-weed alluded to by Wilson. I will relate my observations on a specimen of Thalassidroma Wilsoni which flew in at the port of the steward's pantry in the ship I was on board of one evening in August, 1856, homeward bound, latitude 12° North. First as to the bird flying on board. None of the crew had seen an instance of it before. It could not have been from bad weather, as the sea was smooth and the wind nearly calm; and I can only suppose that it was attracted by the light of a lamp hanging there. This bird was put into a cage for the night, during which it was very uneasy, continually fluttering, and uttering a sharp squeak. Finding it dead the next morning, I skinned it. On opening the stomach I found nothing but about six semi-transparent globular bodies, of the size of duck shot, all of them hollow, except one, which contained a cottony substance. These globular bodies I considered to be the air-vessels of some species of Algæ; they were very similar to those so abundant on the gulf-weed (but we were hardly in its latitude), and which obtained for that plant the name of sea grapes from the early navigators. Now, these air-vessels are very commonly mistaken for seeds, and were most probably so miscalled by Wilson. There is no doubt that the object of the bird in following ships is to pick up the refuse thrown overboard. I have not seen them more abundant in rough weather than in fine, and think that rule does not hold good. They were particularly abundant in the Southern Ocean, in 45° of latitude, and appear to be far less numerous in the tropics, and are again more plentiful in the North Pacific and Atlantic. I think Thalassidroma Wilsoni is the most common in the southern, and T. pelagica in the northern, hemisphere. I also once saw what I considered to be T. Leachii in the Southern Ocean.—*Robert M'Lachlan; Forest Hill, October* 5, 1857.

Note on the Nutcracker (Nucifraga caryocatactes), *&c.*—In the beginning of September last I was staying a few days at Zermatt, in the Canton of Valais, Switzerland. I there found the nutcracker very abundant, and so tame that I was able to observe its habits with ease. The forests about Zermatt are composed of larch and Pinus Cembra, the cones of which last tree seem to form the principal food of the nutcracker. The popular name of the Pinus Cembra in that neighbourhood is Arven, and the nutcracker, in consequence of its fondness for the cones, is called Arven Fögel. I found these birds particularly numerous in the forest, which the path leading to the Riffelberg traverses, which must be familiar to every visitor to Zermatt. They were so tame that I have often approached within ten yards of them before they flew away, and I have frequently watched them, perched on the topmost branch of a Pinus Cembra, hammering vigorously with their powerful bills at the cones, which contain hard nut-like seeds, the kernels of which they seemed to prefer to any other kind of food. I have occasionally seen them alight on the stem of a tree like a woodpecker. With the assistance of a native Chasseur I obtained specimens. I found the bill considerably longer than it is represented in the Plate in Yarrell's 'British Birds,' and not so stout. In flying the white under tail-coverts are conspicuous. I observed these birds also in some other parts of Switzerland, in fact wherever I saw Pinus Cembra, but nowhere in such abundance as at Zermatt. At Chamounix I saw several specimens of that beautiful bird, the wall-creeper, running about the masses of rock on the moraine of the Mer de Glace.—*E. Cavendish Taylor; Doncaster, October* 15, 1857. [There are two supposed species of nutcracker on the Continent: Nucifraga caryocatactes, with a long slender bill; and N. brachyrhynchus, figured by Mr. Yarrell, with a short conical bill. An admirably illustrated paper on this subject will be found at p. 1073 of the 'Zoologist.'—*E. N.*]

Occurrence of rare Sea Birds near Cambridge.—On the 28th of September a magnificent young male of the pomarine skua (*Lestris pomarinus*) was shot at Marston; it is just in that state of plumage so admirably figured by the late lamented Mr. Yarrell in his excellent work on British Birds: a few days subsequently an adult male was procured. On the 9th of the present month (October) some boys caught a tired-out bird on the turnpike road near Cottenham, which proved to be a female of the great skua (*Lestris catarractes*); and since then no less than six have been killed, three of each sex. One specimen of the arctic skua (*L. parasiticus*) has also occurred here, but I do not know the date. On the afternoon of Thursday, October 8, a farmer shot a specimen of the common tern (*Sterna hirundo*); it was sitting on his cow-shed at Hardwick, in this county.—*Samuel Parker Saville; 13, Regent Street, Cambridge, October* 15, 1857.

The Great Weever (Trachinus Draco) *taken near Banff.*—A very fine specimen of the great weever, or king bull, was taken near this place about a fortnight since. This fish appears to be rare in our firth; at least I know of but one other captured here, and that so long ago as 1810; neither did any of our fishermen who saw this specimen thrown on shore know what it was, a fact that shows its great rarity.—*Thomas Edward; Banff, October* 19, 1857.

Lithobius forcipatus Luminous.—The phosphorescent properties of Geophilus electricus have long been known, and the reported phosphorescence of a second species, Scolopendra phosphorea, has been taken for granted, although we have no very precise data whence to derive conclusions either as to the species or properties of the last-named animal. I have to announce a third Myriapod gifted with the phosphorescent properties. My relation, Mr. Samuel Hallam, a chemist residing at Westonsuper-Mare, thus writes to me:—"A few evenings ago, having occasion to cross a back yard after dark, I observed a number of luminous spots on the ground, most of them moving. On my attempting to take hold of one of them it started off at a great pace, and the others in succession followed the example as soon as I touched them. At last I secured one, which appeared brighter than the rest, as it was ascending a wall. In the capture I injured it slightly, and the phosphorescent matter remained so long and so conspicuous on the wall that I showed it to a neighbour who afterwards called in. The animal is a brown centipede." In reply to Mr. Hallam I stated that I knew only one luminous Myriapod, and that was very slow in its movements, and I think only luminous when trodden on or otherwise injured; and that I thought this could not be identical with his active insect. The captured animal came to me by return of post, and proved to be a large specimen of Lithobius forcipatus.—*Edward Newman.*

Extraordinary Migration of Woodlice.—On Saturday last, October 3, I observed, at 3 o'clock in the afternoon, a phenomenon that I think has not hitherto been recorded. Thousands upon thousands of the common pea woodlouse (*Oniscus Armadillo*) were crossing the road from a rubbishy-looking hedgebank towards the little row of houses in which I live. They were of all sizes, and I suppose of all ages, and the movement was entirely in one direction, from the west towards the east; no two individuals seemed to preserve the same line of march, and all moved, as by a common impulse, in precisely the same direction. Their progress could only be described by an infinite number of closely-ruled parallel lines. The crop in the opposite field is mangel wurzel, a plant peculiarly free from the attacks of ordinary vermin; and whether they travelled from the hedgebank, from the mangel wurzel field, or from some unexplored region beyond, I feel myself totally unable to pronounce.—*Id.*

Spider Silk.—The Vienna papers report a successful attempt lately made to obtain silk from spiders, and that several pairs of excellent silk stockings have resulted from the experiment. The species of spider is not mentioned, and no information is given as to the process by which the silk is obtained. Entomologists corresponding with Vienna should institute inquiries on this interesting subject. I have already done so, but at present without success.—*Edward Newman.*

Entomological Club.

THE Entomological Club was established in London, in the year 1826, and existed up to the year 1836 without any printed code of laws or by-laws. At that time a code of laws was agreed on, and printed in the 'Entomological Magazine' for July, 1836; that periodical having originated in the Club, and its cost having been defrayed by its members.

A portion of Rule I. is as follows:—"That it be a special object of the Club to form a model named Cabinet of Insects unquestionably British;" and a portion of Rule III. is as follows:—"That the Cabinet be open at the house of the Curator on [here the days and hours are specified]; and that all entomologists consulting the same shall be at perfect liberty to make any notes, memoranda, descriptions or drawings of any insect contained therein."

These Rules have been in great measure carried out. There has been a constant endeavour to form such a collection: £105 has been expended on cabinets; and the collection was open at the residence of the first Curator, Mr. Newman, for more than ten years; it was then moved to the residence of Mr. Edward Doubleday, the second Curator, where it still continued open to visitors; on the lamented death of Mr. Doubleday it was moved to the residence of Mr. Walker, the third Curator; and, lastly, has been removed to the residence of Mr. Newman, a second time appointed Curator, at No. 7, York Grove, Queen's Road, Peckham, where entomologists are invited to avail themselves of it, for obtaining names, &c., on every Thursday from October to March, both months inclusive, from 6 to 9 o'clock in the evening. Mr. Newman devotes these three hours exclusively to comparing and naming any insects that may be brought to him, and to communicate any other information he possesses. The entire collection has been so long in the process of formation that a great number of the specimens are in a somewhat dilapidated state; and, moreover, so numerous are the changes in nomenclature, rendered necessary by the works of Guenée, Fairmaire, and other continental entomologists, that a rearrangement of the entire collection has become absolutely necessary. This has already been commenced at two points, Lepidoptera and Diptera; the works of Boisduval and Guenée being taken as guides in the Lepidoptera, and Mr. Walker's 'Insecta Britannica' in the Diptera. The following general arrangment will be observed:—

A. Insects having amorphous pupæ.
    1. Lepidoptera.
    2. Diptera.
B. Insects having necromorphous pupæ.
    3. Hymenoptera.
    4. Coleoptera.
    5. Stegoptera.
C. Insects having isomorphous pupæ.
    6. Neuroptera.

7. Orthoptera.
8. Hemiptera.

The arrangement of the Lepidoptera is finished as far as the end of the Noctuina, and the following species are required to make the series complete :—

Thecla Pruni
„ W-album
Polyommatus Arion
Trochilium Vespiforme
„ Chrysidiforme
„ Sphegiforme
„ Scoliæforme, ♂
„ Allantiforme
„ Formicæforme
Cerura bicuspis
Stauropus Fagi
Notodonta Tritophus
Drymonia Chaonia
„ Dodonæa
Gluphisia crenata
Leiocampa dictæoides
Lophopteryx Carmelita
Petasia nubeculosa
Lithosia complana
„ pygmæola
Eulepia cribrum
„ pulchella
Lasiocampa Callunæ
Gastropacha Ilicifolia
Drepana sicula
Psyche and Fumea, *all*
Heterogenea Asellus
Limacodes Testudo
Cymatophora fluctuosa
„ ocularis
„ ridens
Diphthera Orion
Acronycta strigosa
„ Alni
„ Salicis
Synia musculosa
Meliana flammea
Gortyna flavago
Nonagria concolor
Xylophasia scolopacina
Xylomyges conspicillaris
Laphygma exigua
Pachetra leucophæa
Mamestra abjecta
„ furva
Apamea ophiogramma
Miana expolita
Celæna Haworthii
Acosmetia caliginosa
Agrotis saucia
„ cinerea
„ Ripæ
„ obelisca
„ agathina
„ porphyrea
„ pyrophila
„ Ashworthii
Triphæna subsequa
Noctua glareosa
„ depuncta
„ ditrapezium
„ rhomboidea
„ Dahlii
„ sobrina
„ neglecta
Pachnobia alpina
Tæniocampa leucographa
Orthosia suspecta
Cerastis erythrocephala
Dasycampa rubiginea
Xanthia, *all*
Cirrædia xerampelina
Euperia flavago
Dianthæcia Cucubali
Dasypolia Templi
Epunda lutulenta
„ nigra
„ lichenea
Aplecta occulta
Hadena satura

Hadena assimilis
„ suasa
Cloantha, *both*
Cucullia Scrophulariæ
„ Lychnitis
„ Asteris
„ Gnaphalii
„ Absinthii
Heliothis, *all*
Agrophila sulphuralis
Erastria venustula
Bankia
Hydrelia
Micra
Plusia orichalcea
Stilbia anomala
Ophiodes lunaris

In a very few instances there is a specimen, and in two instances there are two specimens, of the insects named in the foregoing list; and yet the species cannot be considered sufficiently represented for a cabinet of reference. It may be stated that more than four examples of a species are not desired, unless very marked varieties. Contributions of specimens are most earnestly solicited, since it is evident that the desire which the Club has in view cannot be carried out without the earnest co-operation of entomologists throughout the kingdom. Boxes to be addressed to Mr. Newman, 9, Devonshire Street, Bishopsgate Street, London, N.E.: the postage and box will be immediately returned. The names of Mr. Doubleday, Mr. N. Cooke, Mr. Edwin Shepherd, Mr. Edleston, Mr. Bond, and Mr. Reading may be mentioned among those who have contributed most generously to the formation of the collection; but very many others have kindly contributed desiderata, and in many ways assisted the Club in carrying out its object. The Curator had also the satisfaction, last winter, of distributing more than a thousand duplicates among those visitors to whom such species were desiderata.

As soon as a list of the Pyralidina (including Crambus) and Geometrina can be prepared, the desiderata will be published in the 'Zoologist,' and a list of desiderata supplied to the cabinet subsequently to the 1st of November, together with the names of the donors, will be given monthly in the same journal.

In the Lepidoptera it has been considered desirable to place the cocoon, pupa and ichneumon by the side of the perfect insect. This, however, has only been accomplished in a few instances; but it is an object kept constantly in view, as likely to render the collection more generally useful, and more decidedly educational. Wherever the larva, pupa, imago and parasite can be obtained, a history of the species is obtained at a glance. It is unnecessary to dwell on an advantage which must be so self-evident; but entomologists are respectfully reminded of the great assistance they can render the Club in this department of its labours.

In Diptera the cabinet is remarkably rich, all the descriptions in the first volume of the 'Insecta Britannica,' unless otherwise specified, being derived from this source. The Neuroptera have been recently examined, and the nomenclature rectified by Dr. Hagen. The names of the Apina, Vespina and Sphecina are in accordance with Mr. Smith's nomenclature; the names of the Lepidoptera are in accordance with those in Mr. Doubleday's cabinet; the Geodephaga are arranged and named in accordance with Mr. Dawson's work. The arrangement of the remaining Coleoptera must remain in abeyance until we have some guide to its accomplishment.

In presenting specimens, donors are most respectfully requested to observe that, however desirable it may be to accompany each specimen with its name, yet so vast a majority of our British insects are as yet unnamed, that this can only be accomplished in a few of the more popular groups. Hemiptera, Orthoptera, Coleoptera and Neuroptera are acceptable without names.

The names and addresses of the members of the Club are given below, and any additional information will be cheerfully given on application to the Secretary or Curator.

James B. Bevington, Neckinger Mill, Bermondsey.
John Birkett, F.L.S., 59, Green Street, Grosvenor Square, W.
J. S. Bowerbank, F.R.S., 3, Highbury Grove, N.
J. W. Douglas, 6, Kingswood Place, Lee, S.E.
Ferdinand Grut, 9, King Street, Southwark, S.E. (*Secretary*).
Samuel Hanson, 47, Botolph Lane, E.C.
Thomas Ingall, Bank of England, E.C.
Matthew Marshall, Bank of England, E.C.
D. W. Mitchell, M.A., F.L.S., 11, Hanover Square, W.
Edward Newman, F.L.S., 7, York Grove, Peckham, S.E. (*Curator*).
Dr. Power, 52, Burton Crescent, W.C.
W. Wilson Saunders, F.R.S., Lloyd's, E.C.
Frederick Smith, 27, Richmond Terrace, Islington, N.
William Spence, F.R.S., 18, Lower Seymour Street, Portman Square, W.
Samuel Stevens, F.L.S., 3, Clayland's Place, Clapham Road, S.
Francis Walker, F.L.S., St. Michael's House, The Grove, Highgate, N.
Robert Warington, Apothecaries' Hall, E.C.
Alfred White, F.L.S., 10, Castle Street, Saffron Hill, E.C.

The meetings are held monthly, at the residences of the members, in alphabetical rotation, at 6.30 P.M.

Notes of a Naturalist on his Passage towards the Far West.

By THOMAS BLAKISTON, Esq., Lieut. R.A.

Ship 'Prince of Wales,' at sea,
July 14, 1857.

I HAVE now been a month on board ship, and twenty-three days out of the Thames. We have for the most part had fine weather and fair winds until three days ago, when a stormy head-wind sprung up, and we did nothing but knock about for a couple of days, about 300 miles south of Greenland, which position you will readily make out on the map. Yesterday, however, a fair wind sprung up in the afternoon, and we are making fair way, steering for the entrance of Hudson's Straits, about 600 miles distance at noon to-day. Our consort the 'Prince Arthur' is in company, but retards our progress considerably, as she does not sail anything like equal to this ship.

The weather for the last few days has been damp, cloudy and cold; this latter, however, we must expect, for we are nearing the regions of ice, and are preparing for the same by getting ready "ice anchors," large iron-shod poles, and other contrivances for the difficult navigation amongst the ice.

* * * * * *

The forms of animal life seen on this northern route across the ocean are but few. We have not seen a whale. Since clearing the coast of Ireland, until we approached Greenland (which we have not seen), the only birds observed were a few storm petrels and a solitary martin. This little wanderer must have been a good 300 miles off the coast. He stayed about the rigging of the ship for the greater part of a day. Since we got well across this side of the Atlantic numerous shearwaters have made their appearance, as well as some one or more species of fulmar (Procellariæ), and an occasional "boatswain," with his "marlingspike" looking tail: this I believe to be a species of skua (Lestris). Not a true gull has been seen, but only these "borderers" of the genus, if I may so call them, Laridæ of the ocean. What puzzles me is how all these birds come to be away out on the ocean without young: surely this is just the time of year that they should be bringing up their offspring on the coasts. Do they hatch their young? — or do they simply deposit their eggs, and then away to the sea and there live, in the hope that their eggs will be cared for by an all-wise Providence? This I offer as a question for naturalists; and should any be inclined to say that it is but few

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To Subscribers.

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Zoological Notes and Queries.

On Preserving Actiniæ.—Can you tell me of any plan for preserving sea anemones in their natural state and brilliancy? I suppose they could, like anything else, be preserved in spirits; but the thing is, to extend or inflate their numerous and many-coloured rays. If you or any of the readers of the 'Zoologist' could help me, I should feel greatly obliged.—*W. C. Turner; Folkestone, October* 15, 1857.

Lasiocampa Callunæ.—Ten years ago this species was published in the 'Zoologist' as new to Science. Certain microscopic characters are pointed out in the imago, and it has since been very confidently stated that the larva and cocoon are very different from those of L. Quercus. I have never yet seen the larva, pupa or imago; but surely our highly-intelligent and observant friend Mr. Harding, who has spent the whole summer in the very metropolis of this supposed species, ought to give us conclusive information on the subject.—*Edward Newman.*

Erratum.—Page 5832, last line, for "among" read "during."

Entomology in Verse.

ALL Entomologists will recollect the Verses in the 'Substitute' describing the natural families of Coleoptera, Hymenoptera and Hemiptera, which were so highly commended for their terseness and scientific accuracy at a late Meeting of the Entomological Society. These are now in course of being reprinted in a neat form, the Verses having been extended to all other families of British Insects. The price will be announced in an early number of the 'Zoologist.'

To Entomologists.

JAMES ARGENT, 32, Bishopsgate Street Without, begs to inform his friends that he has received this year an unusual number of British Lepidoptera, in the finest possible condition, and is enabled to offer them at the following much-reduced prices:—

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